

METHOD AND APPARATUS FOR GENERATING  
A PULSE OF VERY NARROW WIDTH

ABSTRACT OF THE DISCLOSURE

A circuit includes a resonant tunneling device which is responsive to an input signal for causing an electrical signal characteristic to undergo a quantum  
5 jump in magnitude that takes an interval of time. According to one feature, a differentiator responds to the quantum jump in magnitude by producing a narrow pulse with a duration which is approximately the interval of time. According to a different feature, a sampling  
10 portion responds to the quantum jump in magnitude by sampling a signal during a time period having a duration which is approximately the interval of time.